BAY AREA AIR QUALITY MANAGEMENT DISTRICT

ADVISORY COUNCIL
REGULAR MEETING & RETREAT
AND
MEETING OF THE PUBLIC HEALTH COMMITTEE
MEETING OF THE AIR QUALITY PLANNING COMMITTEE
MEETING OF THE TECHNICAL COMMITTEE

WEDNESDAY
JANUARY 14, 2004
10:00 A.M.

PORT OF SAN FRANCISCO
BAYSIDE CONFERENCE ROOM
PIER 1 SAN FRANCISCO 94111

AGENDA

CALL TO ORDER

Opening Comments	Elinor Blake, Chairperson
Roll Call	Clerk
Introduction of New Advisory Council Members	
Role of the Advisory Council	Elinor Blake, Chairperson

COMMENDATION/PROCLAMATION

Recognition of Outgoing Chairperson William T. Hanna	Elinor Blake, Chairperson

PUBLIC COMMENT PERIOD

Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3. *The public has the opportunity to speak on any agenda item. All agendas for Advisory Council meetings and Committee meetings are posted at the District, 939 Ellis Street, San Francisco, at least 72 hours before a meeting. At the beginning of the meeting, an opportunity is also provided for the public to speak on any subject within the Council's or Committee's purview. Speakers are limited to five minutes each.*

CONSENT CALENDAR

1. Approval of Minutes of November 12, 2003

COMMITTEE REPORTS

2. Report of the Air Quality Planning Committee	Kraig Kurucz
3. Report of the Technical Committee Meeting of December 9, 2003	Stan Hayes
4. Report of the Public Health Committee Meeting of December 8, 2003	Brian Zamora

PRESENTATION

5. Cumulative Impact Assessments and the Precautionary Principle

   District staff will provide an overview on these topics.

RETREAT FORMAT

6. Round Table Discussion with District's Management on Key Issues Facing the District, Candidate Assignments Proposed by District Staff and Topics Suggested by Advisory Council Members

   Reference Attachments: draft November 12, 2003 Advisory Council Executive Committee Meeting Minutes and revised Candidate Assignment List.

7. Convene to Working Lunch for Meetings and Discussion Sessions of the Public Health Committee, Air Quality Planning Committee and Technical Committee

   The Council will participate in a working lunch/Standing Committee format in which each Committee will separately meet to discuss and give priority to the study topics discussed by the Executive Committee, District staff and the Council members. The Committees will also establish a meeting schedule for the year.

8. Reconvene to Full Council Format for Follow-up on Committee Discussion Sessions

   The Advisory Council will reconvene to receive the reports of the Standing Committees on their study topic priorities and meeting schedule, and to conduct any further round table discussion concerning them.

OTHER BUSINESS

9. Council Member Comments/Other Business

   Council or staff members on their own initiative, or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on their own activities, provide a reference to staff about factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda.

10. Time and Place of Next Meeting

    10:00 a.m., Wednesday, March 10, 2004, 939 Ellis Street, San Francisco, California 94109.

11. Adjournment

EB:jc

CONTACT CLERK OF THE BOARDS - 939 ELLIS STREET SF, CA 94109 **(415) 749-4965**
FAX: (415) 928-8560
BAAQMD homepage:
www.baaqmd.gov

- To submit written comments on an agenda item in advance of the meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.
- To request special accommodations for those persons with disabilities notification to the Clerk's Office should be given in a timely manner, so that arrangements can be made accordingly.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

CLERK OF THE BOARDS OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS
J A N U A R Y 2 0 0 4

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting; including a Community Tour of three locations in San Francisco	Wednesday	7	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee	Thursday	8	9:30 a.m.	4th Floor Conf. Room
Board of Directors Public Outreach Committee - CANCELLED -	Monday	12	9:45 a.m.	4th Floor Conf. Room
Advisory Council Retreat / Regular Meeting	Wednesday	14	10:00 a.m.	Port of San Francisco Bayside Conference Room, Pier 1 San Francisco, CA 94111
Board of Directors Legislative Committee	Wednesday	14	9:30 a.m.	4th Floor Conf. Room
Regional Agency Coordinating Committee (RACC)	Friday	16	1:30 p.m.	MTC 101 Eighth Street Oakland, CA 94607
Board of Directors Regular Meeting	Wednesday	21	9:45 a.m.	Board Room
Board of Directors Stationary Source Committee	Monday	26	9:30 a.m.	Board Room
Board of Directors Budget & Finance Committee	Wednesday	28	9:45 a.m.	4th Floor Conf. Room

MR:mr
1/5/04 (2:37 p.m.)
P/Library/Calendar/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

CLERK OF THE BOARDS OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS
F E B R U A R Y 2 0 0 4

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting	Wednesday	4	9:45 a.m.	Board Room
Board of Directors Public Outreach Committee	Monday	9	9:45 a.m.	4th Floor Conf. Room
Board of Directors Regular Meeting	Wednesday	18	9:45 a.m.	Board Room
Board of Directors Budget & Finance Committee	Wednesday	25	9:45 a.m.	4th Floor Conf. Room

MR:hl
(12/22/03) 11:35 a.m.

AGENDA NO. 1

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 ELLIS STREET - SAN FRANCISCO, CALIFORNIA 94109

Draft Minutes: Advisory Council Regular Meeting - November 12, 2003

Call to Order:

Opening Comments: Chairperson Hanna called the meeting to order at 10:10 a.m.

Roll Call: Present: William Hanna, Chairperson, Sam Altshuler, P.E., Elinor Blake, Pamela Chang, Patrick Congdon, Ignatius Ding, Fred Glueck, Rob Harley, Ph.D., John Holtzclaw, Ph.D., Kraig Kurucz, Kevin Shanahan, Victor Torreano, Linda Weiner, Brian Zamora.

Absent: Louise Bedsworth, Ph.D., Harold Brazil, Irvin Dawid, Stan Hayes, Norman A. Lapera, Jr.

Public Comment Period: There were no public comments.

Consent Calendar:

1. **Approval of Minutes of September 10, 2003.** Dr. Holtzclaw requested that "2002" be changed to "2001" in paragraph two, line two of Item No. 9 on page five, and moved approval of the minutes as corrected; seconded by Ms. Blake; carried unanimously.

Committee Reports

2. **Report of the Air Quality Planning Committee Meeting of September 30, 2003.** Mr. Kurucz stated the Committee received a presentation from Networkcar on a pilot project in the Bay Area that tests remote sensing devices in taxicabs and paratransit vehicles. The findings suggest that this technology detected emission control problems that would not have gone undetected by the Smog Check II program vehicle emission test. Mr. Glueck added that staff from the Metropolitan Transportation Commission (MTC) gave a presentation on MTC's Long-Range Transportation Plan. The main objectives of this Plan are to fix traffic congestion and road condition problems.

3. **Report of the Public Health Committee Meeting of October 20, 2003.** Mr. Zamora stated that the Committee received presentations from the staff of the Western States Petroleum Association and the ConocoPhillips refinery on optical monitoring technology at refinery fence lines. The refinery is committed to providing fence line monitoring data and finds that it improves community relations. It also feels the optical technology is costly and has a number of technical problems. The Committee has heard from members of the communities near the refinery, the equipment manufacturers and vendors, monitoring system maintenance contractors, refinery environmental and engineering staff, as well as the District. At its next meeting, it will develop recommendations on the referral concerning whether optical monitoring technology should be recommended for installation at other refineries and chemical plants in the Bay Area. Mr. Torreano added that the Committee may collaborate with the Technical Committee in review of some aspects of this issue.

4. **Report of the Technical Committee Meeting of October 20, 2003.** Dr. Harley stated that the Committee developed the recommendations on refinery flares which the full Council will review later today. He noted that refinery flaring is of concern for its impact not only on local air quality but also on regional air quality in terms of ozone and particulate matter (PM) formation. Major subjects of review include the extent to which flaring ensures refinery process safety in shut-downs, start-ups and emergencies, and whether a flare control rule should be developed based on the data that will be gathered from the flare monitoring rule.

   District staff and refinery estimates of hydrocarbon (HC) emissions from refinery flares differ from 22 to 0.2 tons per day, respectively. Those estimates are for different years and employ different assumptions and data. The Committee believes that HC emission estimates from flares require further refinement and, in particular, should be based on actual measurements rather than assumptions. It is critical to have accurate data on the quantity and content of gas flow to the flare and how effectively the HCs are destroyed in combustion. Remote sensing techniques may help in evaluating the HC destruction efficiency at the flare tip.

   Gas recovery systems at one refinery have also significantly reduced flaring emissions in the last two years, and improvements to flare gas recovery systems have also been made at other refineries. The greater attention now given to flaring has lead to improvements in refinery flare management and reductions in flare emission totals. Although the Committee's recommendations focus on HCs, flares emit other pollutants including soot, carbon dioxide (CO_2), nitrogen and sulfur compounds. Even with the complete destruction of HCs, emissions of sulfur compounds will not be affected.

   The Committee recommends that:

   (a) staff work collaboratively with refineries using new data from the flare monitoring rule, to obtain a better handle on HC emissions, and keep interested parties informed.

   (b) staff and the refineries investigate remote sensing technologies for flare emission analysis, and track the flare analyses underway in Texas and the South Coast AQMD.

   (c) adoption of any flare control rule should incorporate and be based on data gathered from the flare-monitoring rule.

   Ms. Weiner suggested that obtaining data on hospital admissions during flaring would be helpful in addressing public health impacts. Mr. Glueck inquired as to what percentage of total HC emissions in the inventory can be attributed to flaring, given the diversity of estimates from the refineries and the District. Dr. Harley replied that actual measurements and engineering estimates based upon historical data often do not match. William C. Norton, Executive Officer/APCO, added that in the 2001 Ozone Attainment Plan, the District estimated refinery flare emissions at 13 tons per day (tpd) of HCs out of a total of 500 tpd of HCs. The estimate of 22 tpd of HCs that was in the initial Technical Assessment Document was preliminary. A final Technical Assessment Document will be issued next month with a revised estimate that will likely be less than 22 tpd.

   Mr. Shanahan raised the question of how broader emission inventory estimates relate to concerns over local impacts of flaring in neighborhoods. Dr. Harley replied that the former is concerned with regional air quality planning, with emission impacts evaluated along wind trajectories and control strategies targeted accordingly. Within a broader regional air quality analysis, it is difficult to identify and quantify the amount of local emission reductions from specific control strategies.

Chairperson Hanna called for public comments, and the following individual came forward:

Dennis Bolt
Senior Coordinator, Bay Area
Western States Petroleum Association

stated the recommendations are sound. Flares are efficient and effective combustion devices that virtually destroy all gases going to the flame, particularly during maintenance events. They are also essential safety devices in emergencies and combust toxic compounds that would be vented. In considering adoption of any flare control rule it is critical that flare operator judgment not be influenced to vent fewer quantities of gas to the flare to prevent receipt of a Notice of Violation as this could lead to a catastrophic event. The refineries also request that the Advisory Council's recommendations on flaring be posted on the District's website and published in the District's forthcoming Technical Assessment Document. The refineries appreciate that the District will further refine its estimates of HC emissions from flares to obtain the most accurate estimates.

Mr. Bolt added that there are no viable alternatives to flaring, and any new refinery would be constructed with flaring systems. Flaring is nonetheless being reduced, with a 70% reduction in flare gas flow achieved by one refinery through gas recovery. The refineries are also making numerous process and performance improvements. The District is facilitating coordination among the refineries regarding the causal analysis of flaring events, and further such analyses based on actual flow data obtained through the flare-monitoring rule will be provided to the District.

Ms. Blake inquired about how refinery proactivity might supplant the prevailing pattern of refinery response to public outcry over major releases so that there is a greater nexus between corporate responsibility and community health and safety. Mr. Bolt replied that the balance derives from an effective evaluation of scientific judgment within the full range of ideas and perspectives. The flare-monitoring rule will provide data critical to evaluations appropriate to that field of inquiry.

Mr. Norton added that staff is facilitating coordination among the refineries in a variety of areas, including flare gas data generation and process improvements. These proactive efforts surpass previous industry and regulatory efforts regarding refinery emissions. Ms. Weiner replied that while coordination has recently improved, the flare monitoring rule and other refinery process improvements were reactions to refinery events that had adverse community health impacts.

Chairperson Hanna and Dr. Harley clarified that HC combustion efficiency in a flare does not assume stoichiometric conversion to carbon monoxide (CO), CO_2, and water (H_2O). Some HCs may be emitted as soot, aldehydes, and other compounds, due to incomplete combustion. A more complete emissions picture is needed.

Ms. Weiner moved adoption of the recommendations with the inclusion of her suggestion that staff gather data on hospital admissions data around flaring events. Ms. Blake seconded the motion, suggesting that staff could consult with the state and county health officers for data on hospital and emergency admissions and physician visits during flaring activities. In discussion, Mr. Altshuler stated that the resource impacts that District staff would face as a result of collecting such data should also be assessed. Mr. Kurucz suggested that the Public Health Committee should first meet to assess any logistical problems associated with examining potentially confidential medical records. Mr. Glueck opined the proposed addition is entirely separate from the referral that was originally given to the Technical Committee on evaluation of refinery flare combustion efficiency.

Dr. Harley stated that the suggestion is supportable but was not a part of the Committee's deliberations. The collection of such medical data might be better linked prospectively to the collection of data from the flare-monitoring rule. This would allow the Public Health Committee to review the parallel data sets then offer the Council a recommendation based on its deliberations. Mr. Norton suggested that staff work with the local health officers and hospitals to assess the resource issue and report back to the Public Health Committee. Mr. Zamora observed that the recommendation does not ask staff to conduct the study on hospital admissions data but merely to confer with health experts who would conduct the health study, thus integrating science, planning and public health.

Chairperson Hanna called for a separate vote on each recommendation in the Committee report:

Recommendation No. 1, with the following added, per previous discussion, at the end: "District staff should collaborate with the staff of the Contra Costa County and/or Solano County health departments regarding data concerning relevant public health impacts during major flaring events."

Ayes: Altshuler, Blake, Chang, Ding, Hanna, Harley, Holtzclaw, Kurucz, Shanahan, Torreano, Weiner, Zamora.

Noes: Congdon, Glueck.

Recommendation Nos. 2 and 3 were each carried unanimously in separate votes by acclamation.

5. **Report of the Executive Committee Meeting of November 12, 2003.** Mr. Hanna stated the Executive Committee:

   - was introduced to the new Executive Officer/Air Pollution Control Officer, Jack Broadbent, whose first official day of work at the District began on Monday, November 10, 2003.
   - discussed the agenda for the January 14, 2003 Advisory Council Retreat.
   - endorsed and now proposes the following slate of Officers for 2004: Elinor Blake, Chair, Brian Zamora, Vice-Chair; Kraig Kurucz, Secretary. Ms. Weiner moved the Council approve the slate of Officers for 2004; seconded by Dr. Holtzclaw; carried unanimously.

6. **Applicant Selection Working Group Meeting of October 17, 2003.** Chairperson Hanna stated that the Working Group met in November to screen applications and interview candidates for four Council vacancies. On October 29, 2003, the Group presented its recommendations to the Board Executive Committee, which approved them. The full Board will vote on these next Wednesday. He added that Pamela Chang has recently tendered her resignation from the Architect category effective the date her replacement is appointed. He directed staff to advertise for this position.

Presentations:

7. **Status Report on 2004 Ozone Planning Process.** Jean Roggenkamp, Planning & Transportation Manager, stated that on October 31, 2003 the Environmental Protection Agency (EPA) made a proposed finding that the Bay Area has attained the national one-hour ozone standard. This is based on data from 2001-2003 in which no monitoring station has recorded more than three exceedances. If the EPA finalizes this finding, several requirements regarding an attainment demonstration, reasonable further progress and contingency measures will be waived for the District. However, the waiver will be withdrawn if the District records a violation of the one-hour standard. The public comment period on this proposed attainment finding will end on December 1, 2003.

The District will continue to address attainment of the state ozone standard and the national eight-hour ozone standard, as well as mitigation of downwind transport impacts. The District, the California Air Resources Board (CARB), Environ Corporation, U.C. Riverside and Desert Research Institute are conducting photochemical modeling for central California. The models are underestimating ozone for historical events in 1999 and 2000. Two working groups have been convened by staff to review on-road motor vehicle emissions, and wind/temperature fields, respectively, to better evaluate and improve model performance. These groups will report to the Modeling Advisory Committee and Ozone Working Group in early December 2003.

In September, community scoping meetings on the ozone plan were held in Rodeo, Richmond, East Palo Alto, Oakland, San Francisco and San Jose. Local public health department staff participated in several of these meetings. Participating citizens offered suggestions on stationary and mobile source control measures, as well as transportation control measures and public transit improvements. These have been added to the package of measures that will be reviewed by staff for potential inclusion in the plan. Other topics raised by the participants focused on local health effects, cumulative air quality impacts, lack of health care data and health care services, and freeways as mobile source emission hot spots. Staff's response to these comments will be posted on the District's website. Some groups requested that the District hold training sessions prior to the community meetings. More meetings will follow when the draft plan is available for comment. Ms. Blake and Mr. Zamora commended staff for the excellent work shown in sponsoring these community meetings and urged the District continue to hold such meetings as a matter of course.

In reply to questions, Ms. Roggenkamp noted that over 350 proposed mobile source and stationary control strategies will be reviewed. Some of these have been implemented already. The District is already considering about a dozen of these control measures and a few of them may move forward. Other measures are either potentially feasible but require further study, entail only minor emission reductions, are not technically feasible or are not cost-effective. Many of these measures are under the jurisdiction of the EPA, CARB or Bureau of Automotive Repair. Others would require legislative approval and an accompanying funding mechanism. Staff will complete its review of these measures in December 2003 and prepare a package for review by the Ozone Working Group in January 2004. The District has hired a consultant, Environmental Audit, to conduct an environmental review of the Ozone Plan and can provide a presentation to the Advisory Council next year.

Ms. Roggenkamp also distinguished "redesignation to attainment" from a "finding of attainment," noting that the former would require the demonstration that attainment derived from emission reductions from control measures and that attainment can be maintained for a period of 20 years.

Other Business:

8. **Report of the Executive Officer/APCO.** Mr. Norton stated that the District will further improve its community outreach efforts through a Bay Area high school and college student intern program. He added that his employment will conclude on November 21, 2003, and that it has been a pleasure to work with the Advisory Council.

   Jack Broadbent, newly appointed Executive Officer/APCO, stated that he began working at the District on November 10, 2003. Noting that he has worked for 20 years in air quality management, at both the South Coast AQMD and EPA Region IX. He added that he is looking forward to working with the Advisory Council.

9. Report of the Advisory Council Chair. Chairperson Hanna expressed his appreciation to:

- the Standing Committee and Working Group Chairs, and Councilmembers, for their hard work.
- District staff for its input in presentations and receptivity to Council recommendations.
- Deputy Clerk James Corazza for his secretarial services to the Council and to its Chair, which have been of noteworthy assistance to the Chair in managing the Advisory Council.
- the three outgoing members of the Council whose terms end on December 31, 2003—Patrick Congdon, Ignatius Ding and Jane Kelly for the time they devoted to Council activities.
- outgoing member Robert Harley, Ph.D., whose term expires on December 31, 2004 but who is leaving at the end of this year. He was appointed to the Council in April of 1997 and served on the Technical Committee, of which he was the Chair this year. He has brought to the Council his expertise in mobile source emission and photochemical modeling, and provided presentations on the Caldecott Tunnel studies, as well as of diesel fuel use as a means of measuring emissions in various parts of the state. His scholarship, technical knowledge and quality participation have been invaluable to the deliberations of the Advisory Council.

Dr. Harley replied that it has been a real pleasure to serve on the Advisory Council and to work with its members and the staff. Noting that he must devote more time to research and committee work at U.C. Berkeley, Dr. Harley stated he would like to return to the Council later in his career.

Mr. Congdon expressed his appreciation for the opportunity to serve on the Council, and noted that his appointment as General Manager of the Santa Clara County Open Space Authority has rendered his schedule too full to permit his consistent participation in Advisory Council meetings.

Mr. Ding expressed his appreciation for the opportunity to serve on the Council, and noted his change in jobs requires considerable travel and poses schedule conflicts with Council meetings.

10. Council Member Comments/Other Business. There were none.

11. Time and Place of Next Meeting. 10:00 a.m. – 2:00 p.m., Wednesday January 14, 2003. Ms. Blake noted she would seek the assistance of Dr. Harley in trying to secure a meeting place at the U.C. Berkeley campus for the Advisory Council Retreat and Regular Meeting.

12. Adjournment. 11:57 a.m.

James N. Corazza
Deputy Clerk of the Boards

:jc

AGENDA NO. 3

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT MINUTES

Advisory Council Technical Committee Meeting
9:30 a.m., Tuesday, December 9, 2003

1. **Call to Order/Roll Call.** 9:37 a.m. Quorum Present: Robert Harley, Ph.D. Chairperson, Sam Altshuler, P.E., Louise Bedsworth, Ph.D., William Hanna, Stan Hayes, John Holtzclaw, Ph.D. Absent: Norman A. Lapera, Jr.

2. **Public Comment Period.** There were no public comments.

3. **Approval of Minutes of October 20, 2003.** Dr. Holtzclaw moved approval of the minutes; seconded by Mr. Hayes; carried unanimously.

4. **Ozone, Nitric Oxide (NOx) and Hydrocarbon (HC) Ambient Concentration Trends in the Bay Area.** Richard Duker, Supervising Air Quality Meteorologist, stated that from 1965 to 2003 excesses of the national 1-hour and 8-hour ozone standards have decreased in the levels of ozone over the standard, as well as the number of excess days and stations per episode. Excesses of the state ozone standard also decreased from 1965 to 2000, but thereafter have slightly increased due to the increasing number of days with temperatures between 90-95ºF. In 2003, there were few ozone excesses in Marin and San Francisco counties where the sea breeze is strong. Ozone excesses are the most numerous in the South and East Bay, with Livermore recording the most excesses of the national 1-hour standard. From 1994-2003, data in the Livermore area indicates a correlation between temperature at or above 95ºF and excesses of the 8-hour standard. However, excesses of the 1-hour standard in Livermore have been decreasing despite high temperature situations.

   With regard to meteorological conditions and their relation to ozone formation in the Bay Area, atmospheric pressure readings on May 31, 2003 showed a high-pressure trough off the coast. A maximum of 59 parts per billion (ppb) ozone was measured. Any excess of the 8-hour standard of 85 ppb was unlikely under such conditions. On June 1, 2003 a high-pressure ridge began to form over the Bay Area, with temperatures reaching 93ºF and ozone levels increasing to 74 ppb. On June 2, 2003, the amplitude of the ridge increased and the maximum temperature reached 98ºF. Ozone levels were measured at 93 ppb and therefore exceeded the 8-hour standard. On July 17, 2003, an "extended four corners high" developed with the center of high pressure forming over the intersection of Colorado, New Mexico, Utah and Arizona. A maximum temperature of 105ºF was recorded in the Bay Area and an excess of the 8-hour ozone standard occurred at 89 ppb. The 1-hour ozone standard of 125 ppb was also exceeded with levels reaching 128 ppb in Livermore. This weather pattern, which wedges a wave of high pressure between Oregon and California, tends to produce federal ozone excesses, particularly as the on-shore flow pressure gradient is reduced, producing stagnant air conditions. On July 18, 2003, when the pressure gradient did not impede on-shore wind flow, even with high pressure and a maximum high temperature of 103ºF, a reading of only 61 ppb occurred for the 8-hour standard. Therefore, the District meteorological staff did not forecast a Spare the Air Day.

The District uses a forecast equation to calculate the ozone concentration relative to the 8-hour standard that includes these factors: maximum expected temperature, ozone concentration at 7:00 a.m., wind speed at the Kregor Peak monitoring site, previous day maximum ozone temperature, coastal monitoring site wind speeds, an El Nino factor, the pressure gradient between Medford, Oregon and San Francisco, maximum nitric oxide (NO) morning concentrations, and a vertical temperature gradient between 850-1000 millibars for Medford/San Francisco at 4:00 a.m. Chairperson Harley suggested evaluating maximum weekday and weekend NO concentrations, which should be lower by 30-40% on the weekends.

Dr. David Fairley, Statistician, stated that progress in reducing ozone excesses in the Bay Bay Area was made between 1970 and 1990. Progress since the 1990's is evident on a smaller scale. Ozone levels in the District are very close to the federal standards, rendering attainment susceptible to small variations in meteorological conditions or emissions. The 1-hour federal standard allows that a site may exceed 124 ppb once per year averaged over the latest three years. If a single site records four excesses in a three-year period, the entire region is declared out of attainment.

A design value for each site has been developed. It is the average excess ozone concentration that would occur once annually under normal weather conditions. This value is the fourth highest daily maximum ozone level measured over the last three years. The design value for the District is the maximum of the design values among all of the District's air monitoring sites.

Bay Area design values from the 1970s to the 1990s show a discernable decrease but remain fairly constant in the 1990s. The design value went below the national standard in 1993 and 1994. The increase in the design value for 1995 was probably a combination of meteorology and reformulated gasoline, but has not been definitively explained. The decrease in design value from 1999 to 2000 was due to meteorology. Population exposure to ozone in the South Bay has decreased overall.

A comparison of Bay Area with Livermore design values from 1970-2003 shows that sites in the east and south Bay have not made much progress. Livermore design values remain fairly constant, although some minor progress is discernable. The more recent excesses of the federal 1-hour standard at Livermore occurred on days over 100ºF, whereas in the early 1990's excesses occurred at lower temperatures starting at 95ºF. If wind speeds are taken into account during the period from 1990-2003, ozone excesses at Livermore occur when the temperature is either above 98ºF, or above 95ºF with wind speeds at Travis ranging from 5-8 mph. These are necessary but not sufficient conditions for excesses and may be labeled "ozone conducive days" (OCDs).

There were 27 OCDs at Livermore in 1984 but only two in 1995. A comparison of ozone excesses at Livermore in relation to OCDs over recent decades reveals that more extreme conditions are needed to exceed the 1-hour standard. When temperature is isolated in this analysis, there is a steady decrease in the potential for ozone per given temperature increment. Where 110 ppb would have been expected in earlier years, 100 ppb would now be expected. This constitutes persuasive statistical evidence that progress has been made.

This conclusion is confirmed by multiple regression analysis that accounts for maximum temperature, Travis mid-day winds, a weekend/holiday effect, and previous day afternoon aloft winds. Averages evaluated over a 25-year period show that in recent years there are fewer ozone exceedances on OCDs, while in the 1980s there would have been many more excesses on such days. When meteorological adjustments are made, statistically significant progress is evident.

A review of design values adjusted for meteorology reveals that in the early 1990s the conditions were more conducive to producing high ozone, while in recent years conditions are less conducive to generating high ozone. Based on a variety of methods to estimate design values, the Bay Area's design value is slightly above 125 ppb. However, even if it were 123 ppb, attainment of the 1-hour standard would be susceptible to minor variation in temperature or emission levels. A design value of 123 ppb provides a 50% probability that the region would exceed the standard. If the region were to reduce ozone by one ppb annually there is an 80% chance of exceeding the standard.

Data for Bay Area 24-hour averages of nitric oxide (NOx) in the emission inventory track well with ambient data and show a continuous reduction from 1980. Similar comparison of data for volatile organic compounds (VOCs) show a steeper downward trend for ambient data at the San Jose, Livermore and Fremont sites than in the Bay Area generally. Ratios of VOC/NOx from 1985 to the present are fairly consistent.

Chairperson Harley inquired as to why the 30-40% reduction in ozone precursors over the last 25 years does not show corresponding reductions in ozone excesses. Dr. Fairley replied that further research is necessary, especially regarding the influence of population growth and changes in the dynamics of reactivity. Peter Hess, Deputy Air Pollution Control Officer, added that transport from the Central Bay may be an additional factor. Mr. Altshuler agreed, noting that photochemical reactivity appears to be slower now than in previous years. Most violations now occur in June and July rather than September or October as in earlier years. Dr. Fairley observed that in more recent years the months of May and October have started to drop out as ozone excess months.

In discussion of the presentations, Mr. Hayes noted:

- The Livermore design value is resistant to efforts to reduce it.
- Trends in population-weighted exposure should also be included in this analysis, especially as this category was included in the most recent version of the State Implementation Plan.
- How the trends identified by staff will be affected by increases in vehicle miles traveled and population increase also requires evaluation.
- The residual probability of exceeding the standard even if the District is below it is important.

Mr. Altshuler added that the equation for the forecasting the 8-hour ozone standard requires further sensitivity analysis to determine the key variable and help identify whether or not the District can control it. Chairperson Harley stated that it now appears that meteorology played a greater role than emission reductions in the 2003 ozone attainment record. On the other hand, however, while the 30-40% reduction in precursors over the last 25 years may not register in Livermore, the zone of high ozone is being compressed both in space and time. This shows how the trends in reducing ozone precursors are being reflected. This also has an impact in terms of population exposure metrics, and offers a positive public health message.

Dr. Bedsworth added that 2003 was also the worst summer ozone season on record for the Central Valley. This raises questions about pollutant transport. Mr. Hanna added that slower reactivity geographically places peak ozone concentrations further downwind. As it appears that ozone reductions will only be incremental from stationary sources given the increased number of vehicles on the road, increased ridership in public transit will play an important role in achieving further ozone reductions in the future. Mr. Altshuler added that three other factors will influence ozone formation: Smog Check II, the removal of MTBE from fuel, and the retrofitting of diesel engines with particulate matter traps, which will influence emissions of NOx.

5. **Update on the District's Modeling Efforts.** Saffet Tanrikulu, Ph.D., Research & Modeling Manager, stated that the Central California Ozone Study (CCOS) modeling team is comprised of staff from the District, Environ Corporation, the Air Resources Board (ARB), Desert Research Institute, Alpine Geophysics, and U.C. Riverside. The field program conducted surface and aloft meteorological measurements for wind speed, wind direction and temperature, to provide modeling inputs and evaluate modeling outputs. Dr. Tanrikulu displayed a map of the study and model domain, and identified 300 surface meteorological stations sponsored by the various CCOS participants. He described the deployment of the diverse monitoring stations and how they are targeted to measure specific compounds. Mr. Hess added that with regard to Dr. Bedsworth's previous observation on transport, the stations adjacent to the Bay Area have met the 1-hour and 8-hour standards, while the stations east of Metropolitan Sacramento are prone to exceedances.

   Dr. Tanrikulu reviewed the flight patterns over the modeling domain of five aircraft obtaining aloft measurements during the selected ozone episodes. Such measurements were used to determine modeling boundary conditions for the region for a variety of compounds and were compared with the original CCOS boundary conditions. More recent aloft measurements of ozone were much lower than the boundary conditions sets in the original CCOS study. Aloft measurements of NO and NO_2 were slightly higher in the original CCOS study than what aircraft measurements showed. Formaldehyde was higher in the original CCOS study than what was observed in measurements aloft. Aircraft measurements over the ocean during the ozone episodes were somewhat limited, and whether or not these are ultimately representative of boundary conditions is therefore unclear.

   The Field Program focused on three episodes. The first was from June 14-15, 2000, during which an unusual 150 ppb of ozone was measured at Livermore. The second was from July 30-August 2, during which Livermore recorded an excess of 126 ppb on July 31, 2000. There were also high ozone concentrations in the San Joaquin Valley as well: 151 ppb. A third period was studied but no Bay Area excesses were recorded, although the San Joaquin Valley recorded 165 ppb.

   For the CCOS modeling emissions inventory, the ARB prepared the emission inventory and modeling inventory. However, a review of the data suggests that reactive organic compounds are somewhat underestimated at 410 tons per day (tpd) when the total has usually registered between 550-600 tpd. NOx is overestimated at 662 tpd, compared with previous inventory totals estimated at 550-600 tpd. Staff is currently discussing these disparities in the inventory with the ARB.

   Quality assurance review of CCOS data will compare model outputs with observed data. He described the models that are being used by the District and Environ Corporation with regard to the number of vertical layers and surface grid resolution. He noted that the District is comparing a four-kilometer grid resolution with a more detailed 300-meter horizontal grid resolution with the aim of improving the terrain feature of the model. This is important, as the simulated winds for late morning on the July 31, 2000 ozone episode do not correspond to observed data. If there are transport impacts from the North Bay to Livermore, this could be of particular concern.

   Dr. Tanrikulu noted that between 3,000-5,000 separate model simulations are being reviewed and cited several examples. For Bodega Bay on July 31, 2000, observed and simulated wind speed, wind direction and temperature data from the early morning hours show that observed wind speed averaged was two meters per second. However, the model estimates wind speeds at four to five meters per second, leading to an underestimation of ozone by the model due to the over-ventilation of the area.

With regard to wind direction, the model shows a westerly wind direction while observed data indicates a southerly direction. For July 29-31, 2000 at Livermore, the model is accurate on wind speed, but it underestimates temperature in the afternoon by 4-6ºC. This affects atmospheric photochemistry and may lead to an underestimation of ozone. Accurate measurements along the Highway 680 corridor are also important. Improved grid solution may assist the model in more closely approximating observed data. However, efforts to force four-dimensional simulated data toward observed data have not been successful. This may be due to the location of the stations, where more are found in the North Bay and Livermore but only one station along the 680 corridor.

At Bodega Bay on July 29, 2003, four-kilometer grid resolution simulations show light winds during the morning from ocean to land, while the observed data shows light winds flowing from land to ocean. This may lead to the over-ventilation of the area. On July 31, 2000 at Livermore, observed data show the sea breeze begins at noon but the model predicts it will start at 9:00 a.m. This may cause an overestimation of area ventilation and pollutant transport to the east. Temperature plots for simulated and observed data for Livermore on July 31, 2002 from 5:00 a.m. to midnight are cooler than observed data. At higher elevations in Livermore during the afternoon on the same day, the model predicts lower than observed temperatures as well. Model estimates of ozone on the same day are at 113 ppb but the observed data registered 126 ppb of ozone.

The Modeling Advisory Committee has created two working groups to address meteorology emissions inventory issues. They share data and simulate the same episode to understand the deficiencies in the model and make improvements. The groups use common data and evaluation methods and will identify the problems in the model and devise a plan to address the problems. The meteorological working group will focus on improving terrain and surface feature information to make the model as representative as possible. Categories include soil moisture, vegetative cover, deep soil temperature, surface roughness, soil heat capacity and surface albedo. Statistical methods to evaluate model performance on surface features will be conducted in three dimensions, with mixing heights, sea breeze and other mesoscale features.

The emissions working group is reviewing uncertainties in on-road mobile source emissions for heavy-duty and light-duty diesel NOx emissions. The group will improve documentation of all emission inventory processing, generate separate emission files for on-road heavy-duty diesel emissions, and conduct emissions scaling.

A tentative completion date has been set for February/March 2004 to implement the identified improvements to minimize ozone underestimation. Mid-range goals in 2004-2005 are to fully improve and evaluate the models. Long-term goals from 2005-2007 are to simulate the ozone episodes for the 1-hour and 8-hour standards, as well as for particulate matter episodes.

6. **Committee Member Comments**. The Technical Committee members expressed their esteem for Chairperson Harley for his leadership of the Committee and weighty contributions to the Council.

7. **Time and Place of Next Meeting**. At the call of the Chair.

8. **Adjournment.** 12:12 p.m.

James N. Corazza
Deputy Clerk of the Boards

AGENDA NO. 4

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT MINUTES

Advisory Council Public Health Committee Meeting
1:30 p.m., Monday, December 8, 2003

1. **Call to Order – Roll Call.** 1:34 p.m. Quorum Present: Brian Zamora, Chairperson; Elinor Blake, Victor Torreano, Linda Weiner. Absent: Ignatius Ding.

2. **Public Comment Period.** There were no public comments.

3. **Approval of Minutes of October 20, 2003.** Ms. Weiner moved approval of the minutes; seconded by Mr. Torreano; carried unanimously.

4. **Development of Recommendations on Refinery Fenceline Monitoring.** In assessing whether the type of optical monitoring equipment in operation at the ConocoPhillips refinery in Rodeo should be applied to other refineries and chemical plants in the Bay Area, the Committee members identified and discussed the following central issues:

   - There has been no correlation between refinery releases and real-time data.
   - Optical monitors can provide an additional source of data on refinery fugitive emissions.
   - Optical monitoring data have not been standardized for either reading or interpretation.
   - More recent technology has improved upon older optical equipment but is quite costly.
   - Rodeo and Crocket community members feel positive about the optical monitoring system even though it may not be predictive of release events.
   - The District's website has been significantly improved with the addition of monitoring data, but the broader question concerns how to provide the community with useful air quality data and the availability of other District tools that would achieve such a result.

   Ms. Blake stated that the Committee could recommend the refinery continue to conduct optical monitoring, work with community groups, and refine and post the data on the Contra Costa County website. Also, the District's website should contain a link to the refinery's optical monitoring data page on the Contra Costa County website. She added that the citizens of Rodeo and Crockett also wanted to see the District put the real-time optical monitoring data to use. However, the Committee has not yet ascertained from staff what that might entail. These types of data may be more useful in the analysis of chronic than in acute health effects.

   Ms. Weiner suggested that the Good Neighbor Agreement between the ConocoPhillips refinery and its adjacent communities is a good model for use by other refineries. Chairperson Zamora noted that the Committee would evaluate optical technology primarily from a public health perspective, although associated issues are not excluded from the review. He added that the referral requires more of a contextual rather than a *per se* evaluation of the optical monitoring technology, based on whether its technical capability justifies a broader application.

Ms. Blake added that staff suggestions regarding additional aspects of this issue include:

- evaluating various monitoring deployments of fixed and canister samplers
- reviewing the ground level monitoring (GLM) requirements for possible update
- further improving the continuous emissions monitoring system
- requiring each refinery equip a van with remote sensing devices, and/or other monitoring and sampling equipment, for use in emergency release situations.

Cost considerations for each monitoring and sampling technology must also factor into the review. Whether data from other monitoring systems could be posted on line, in addition to District monitoring network data, should also be considered. The District's website could be further improved by including explanatory material that clarifies monitoring data symbols and tables of chemical compounds, and explains how these relate to meteorological data. The availability of funding from industry or various foundations should be considered as well.

Chairperson Zamora suggested that as a standard feature of presentations at community meetings, the District should include an introduction to the District's website. Kelly Wee, Compliance & Enforcement Division Director, stated that at the community meetings in which a new or modified rule is being presented, the most typical questions concern monitor siting. However, such an introduction could certainly be provided. Gary Kendall, Technical Division Director, added that under the District's flare monitoring rule gas flow rates to the refinery flares will be measured and monthly reports will be provided to the District. As part of the rule, combustion at the flare tip will be recorded on DVD and then posted on-line.

Noting that the community is concerned over both acute and chronic health effects, Ms. Blake suggested that the District's website include a link to the Crockett health study. In addition, since the District posts incident reports that contain monitoring data after a certain period of time after the incident has elapsed, it would be useful to post such data on the District's website.

Mr. Kendall replied that longer-term studies usually require a minimum of one year's worth of monitoring data that health experts use to assess chronic health risks since annual averages are developed and used in risk assessment. Fenceline monitoring, and mobile monitoring with grab samples, each focus on the acute health effects. In emergency incidents, sharp data variations are reviewed for possible correlation with observed health effects. In the General Chemical release of sulfuric acid mist, adverse health effects were indeed observed. Some incidences concern odor nuisances or visible emissions but do not always pose highly acute health risks.

Ms. Blake observed that health experts will have to recognize and evaluate increasing trends in the diagnosis of asthma among residents of communities near the refineries. Mr. Kendall replied that sufficient levels of SO_2 on a short-term basis can aggravate asthma. Ms. Weiner added that apart from asthma, issues concerning cumulative risk also arise. Ms. Blake offered to develop a list of major findings and recommendations for review at the next Committee meeting.

Chairperson Zamora noted that in evaluating whether asthma and other respiratory illnesses have increased around refineries, other factors such as the age of the community, personal history, and mobility factor into the analysis. Data on the health of refinery employees would be of importance as a barometer since on-site workers are the most likely to show health impacts.

Chairperson Zamora called for public comment and the following individual spoke:

Dennis Bolt
Senior Coordinator, Bay Area
Western States Petroleum Association

stated that some companies have conducted epidemiological work and he will evaluate what data can be publicly reported to the Committee at a future meeting. Dr. Wendell Brunner of the Contra Costa County Health Department has noted that in west Contra Costa County asthma rates have increased, although they are only one third of the levels that are currently found in Alameda County. Former Air District Board member Sunne McPeak has noted that asthma is increasing while emissions of criteria and toxic air pollutants are decreasing in the Bay Area.

Mr. Bolt added that while there are abundant emissions data that could be made available by the refineries, most of the record is in hard copy. Some of the data are also proprietary and contain some process knowledge that cannot be distributed. The District's posting of emissions data on the website is a good first step. Clarification of that data in subsequent iterations can follow. In particular, clarification of the summary flare data would be the most useful to the public.

Ms. Blake replied that the refineries can post emissions data on their respective websites as well. The matter of providing funding to further disseminate data to the public is also worthy of consideration. Mr. Bolt replied that he would relay this discussion to the refinery staff. The refineries can collaborate with the District to get meaningful information on the website.

Peter Hess, Deputy Air Pollution Control Officer, noted that if optical fence line monitors do not fulfill community information needs in emergency situations, perhaps other mechanisms are available. The use of a color-coded screen for presentation of emissions data on the District's website could be considered. If GLMs have focused on hydrogen sulfide (H_2S) and sulfur dioxide (SO_2) due to their odoriferous qualities, additional pollutants could now be considered.

Ms. Blake urged consideration of the extent to which toxics can be folded into the data posted on the website, in addition to the criteria pollutants that the District monitors. Mr. Kendall noted that data for toxic pollutants are not available in real-time. The District's laboratory analyzes for low concentrations of toxic materials from fixed samples. Accordingly, it may be preferable to present toxics data to the public in terms of the categories of risk assessment.

5. **Committee Member Comments/Other Business.** Ms. Blake stated that the September 2003 issue of the *American Journal of Public Health* focuses on smart growth and indoor air quality.

6. **Time and Place of Next Meeting.** At the call of the Chair.

7. **Adjournment.** 2:40 p.m.

James N. Corazza
Deputy Clerk of the Boards

AGENDA NO. 5

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

To: Advisory Council

From: James N. Corazza, Deputy Clerk

Re: Cumulative Impacts and the Precautionary Principle

Council Chairperson Elinor Blake has requested that the following URL be identified for additional reference in connection with Item No. 5 on the Retreat Agenda:

www.calepa.ca.gov/envjustice/documents/2003/finalreport.pdf

:jc

AGENDA NO. 6

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT MINUTES

Advisory Council Executive Committee Meeting
9:00 a.m., Wednesday, November 12, 2003

1. **Call to Order – Roll Call.** 9:10 a.m. Quorum Present: William Hanna, Chairperson, Elinor Blake, Robert Harley, Ph.D., Kraig Kurucz, Brian Zamora. Also present: Sam Altshuler, P.E.

2. **Public Comment Period.** None.

3. **Approval of Minutes of July 9, 2003.** Mr. Zamora moved adoption of the minutes; seconded by Dr. Harley; carried unanimously.

4. **Standing Committee Chair Reports on Committee Work Plans and Recommendations.** Mr. Kurucz stated that the Air Quality Planning Committee (AQPC) met on September 30, 2003 and received two presentations. The first was an update from Networkcar on the use of remote sensing technology in high use vehicles such as taxicabs. The second was provided by the staff of the Metropolitan Transportation Commission (MTC) on its Long-Range Transportation Plan.

   Dr. Harley stated that after five meetings on the subject, the Technical Committee will present recommendations on refinery flaring at the Council meeting today. The Committee will meet in December 2003 to receive a staff presentation on fine particulate and ozone trends in the Bay Area.

   Mr. Zamora stated the Public Health Committee is reviewing optical monitoring technology at refinery fence lines. At its October 2003 meeting, staff from the ConocoPhillips refinery in Rodeo and the Western States Petroleum Association (WSPA) presented industry perspectives. Industry has greater confidence in data from ground level monitors than from optical monitors. It also considers the latter to be expensive and lacking in any statutory mandate. The Committee will develop recommendations on this technology from a public health perspective at its next meeting.

5. **Discussion and Adoption of Recommendation of a Slate of Officers for 2004.** Chairperson Hanna stated that, by past practice, Vice-Chairperson Blake would be nominated for Chairperson, and Secretary Zamora for Vice-Chairperson. Noting that the nominee for Secretary is drawn from Standing Committee Chairs, he inquired of Mr. Kurucz if he would accept nomination as Council Secretary. Mr. Kurucz replied affirmatively. Ms. Blake moved the Committee endorse the aforementioned slate of officers for 2004; seconded by Dr. Harley; carried unanimously.

6. **Discussion of January 14, 2004 Retreat and Regular Meeting.** Ms. Blake indicated that she is considering holding this meeting off-site and is exploring sites that are free and BART accessible. She added that she is considering inviting a keynote speaker. The Council's task will be to discuss the key air quality issues facing the District and to develop a work plan for the year.

Peter Hess, Deputy Air Pollution Control Officer, stated that the Council has done a fine job in reviewing key issues and developing sound recommendations. Staff is pleased with the collaborative process that it has with the Council. He distributed a document entitled, "Candidate Assignments for the Advisory Council," containing seven topics for possible review by the Council:

1. Review the control measures for volatile organic compounds (VOCs), nitric oxide (NOx) and particulate matter (PM) in the South Coast AQMD attainment plan recently approved by the Air Resources Board (ARB); make recommendations to the Air Pollution Control Officer (APCO) for implementing them in the Bay Area.
2. Review and provide comments to the APCO on the draft Bay Area AQMD State and Federal Air Quality Attainment and Maintenance Plans. Continue participation on the Modeling Advisory Committee and the Ozone Working Group.
3. Review and provide comments to the APCO on the ARB mobile source emission calculation models.
4. Review and provide comments to the APCO on the impact of State policy to reduce both VOC and NOx from mobile and stationary sources as aggressively as possible on attainment of the National Ozone standards in coastal areas and in all California air basins.
5. Review and provide comments to the APCO on the Toxic New Source Review (NSR) Rule amendments.
6. Review and provide comments to the APCO on the draft California Environmental Protection Agency (Cal-EPA)/ARB Environmental Justice implementation protocols.
7. Review and provide comments to the APCO on the impact of daylight savings times on peak 1-hour and 8-hour ozone concentrations.

In discussion of these topics, Ms. Blake inquired as to the "cumulative risk" issue that is under discussion at the state level. William C. Norton, Executive Officer/APCO noted that this would be included in No. 6, to which the "precautionary principle" issue should be added. Mr. Hess noted that staff and guest speakers could address specific aspects of the topics at the Retreat and suggest ways to review them. Dr. Harley requested that Executive Management and the Division Directors attend the Retreat and participate in the Committee breakout sessions.

Mr. Kurucz stated that the AQPC completed review of its work plan topics earlier than expected. The Committee met for many consecutive months to develop its Smog Check II recommendations and would like an update on their implementation. Ms. Blake suggested that in mid-2004 the Council's Executive Committee evaluate the progress made on the standing Committee work plans, since efficiency is unpredictable. Dr. Harley added that the Council may also serve as an early warning system for issues that are not yet, but likely to be, on the regulatory calendar.

Mr. Norton, stated that Topics 1 and 2 have the highest priority. The ARB is recommending the District be declared in attainment for the one-hour federal ozone standard. It is unclear whether the District must submit an Attainment or Maintenance Plan after the Notice of Attainment is filed by the EPA. However, additional pollution control measures will be necessary in either scenario. Jack Broadbent, newly appointed Executive Officer/APCO, added that the 30-day comment period on this Federal Register notice concludes at the end of November 2003. The EPA will very likely finalize its federal recommendations at the end of this year.

Mr. Norton observed that for the federal one-hour ozone standard for the last three years, the District had one year with no exceedances, another with two and the third with one. Therefore, there can be no exceedances next year if this attainment record is to be sustained. The District's air quality plans must also address pollutant transport to adjacent air basins. This issue should be included in No. 2. The due date for review of Nos. 1 and 2 is mid-year 2004. Mr. Kurucz stated the AQPC has a role to play in reviewing Nos. 1-6. Dr. Harley stated the Technical Committee has a role in reviewing Nos. 1-5, but if a cumulative risk model is developed next year, the Committee can review it under No. 6.

Ms. Blake noted that it would be helpful to have a due date for completing review of each topic. Mr. Kurucz observed that these topics are broad and may contain certain portions with a higher priority than others. Dr. Harley added that since the Plans identified in the topics are probably voluminous, the Committees should focus on the specific areas in these Plans that are either controversial or contain uncertainties in data. Mr. Altshuler suggested that the Council review secondary formation of $PM_{2.5}$ from nitrate. Mr. Kurucz suggested that the Council review the implementation of the Smog Check II program, including the efficacy of the diagnostic equipment and the cost of the test. Mr. Norton urged the Council to invite a speaker from the Bureau of Automotive Repair (BAR) to address these issues. Chairperson Hanna stated that the topics suggested by staff and the Committee members would be further discussed at the Council Retreat.

Mr. Kurucz inquired about the role of the Council in reviewing the District's legislative agenda. He noted that the AQPC has reviewed certain bills and could act as a screening committee for review of legislation. Ms. Blake stated the Council would benefit from having a perspective on the legislative context in which the District is operating. The Committee members requested that staff apprise the Council of the bills that it is tracking and report on them as they move toward the point of passage. They also requested that executive staff ask the Board Legislative Committee if there are specific areas in which it wishes to receive Council input on pending legislation.

Mr. Norton replied that he would so inquire and invited the Committee members to attend the Legislative Committee meeting scheduled for Monday, November 17, 2003. He suggested that in the future a legislative report be added to the Council's Regular meeting agenda. Ms. Blake replied that an attachment of key bills for information would suffice, and if review of an important bill arises, it could be assigned to a Committee. Mr. Norton indicated staff would forward to the Council the Legislative Committee's agendas, reports and official actions, and also summarize its actions at the Council Regular meeting. If the Legislative Committee seeks input from the Council on a specific bill, a Council Committee could review it with the District's Legislative Analyst.

7. **Committee Member Comments/Other Business.** Ms. Blake thanked Mr. Norton for his fine work during the interim period that he has worked at the District as Executive Officer and Air Pollution Control Officer. Mr. Norton replied that he has greatly enjoyed his work with the Air District staff and has found the Advisory Council to be both supportive and helpful.

8. **Time and Place of Next Meeting.** At the call of the Chair.

9. **Adjournment.** 9:57 a.m.

James N. Corazza
Deputy Clerk of the Boards

AGENDA NO. 6

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

January 6, 2004

To: Advisory Council

From: James N. Corazza, Deputy Clerk

Re: Candidate Assignment List Revised by District Staff on January 5, 2004

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1. Review the control measures for volatile organic compounds (VOCs), nitrogen oxides (NOx) and particulate matter (PM) in the South Coast AQMD attainment plan recently approved by the Air Resources Board (ARB); make recommendations to the Air Pollution Control Officer (APCO) for implementing them in the Bay Area.
2. Review and provide comments to the APCO on the draft Bay Area AQMD State and Federal Air Quality Attainment and Maintenance Plans. Continue participation on the Modeling Advisory Committee and the Ozone Working Group.
3. Although the most recent version of the ARB motor vehicle emission model (EMFAC 2002) shows improvements over previous versions, field studies, ambient measurements, on-road motor vehicle emission measurements, photochemical modeling and fuel based inventories indicate that the ARB motor vehicle emission model continues to under-predict VOC emissions. Typically motor vehicle VOC emission inventories have been adjusted upward to achieve acceptable photochemical model performance. Review and provide comments to the APCO on the ARB mobile source emission calculation model and the impact on the development of Bay Area attainment plans for ozone.
4. Various studies indicate that ozone formation in California coastal areas, including the Bay Area, and in some inland areas has been VOC limited for several years. The California Clean Air Act effectively requires implementation of all feasible control measures for both VOC and NOx. Review studies and provide comments to the APCO on the impact of further NOx emission reductions on the attainment of the National and State ozone standards in the Bay Area.
5. Review and provide comments to the APCO on the Toxic New Source Review (NSR) Rule amendments.
6. Review and provide comments to the APCO on the draft California Environmental Protection Agency (Cal-EPA)/ARB Environmental Justice implementation protocols.
7. Review and provide comments to the APCO on the impact of daylight savings times on peak 1-hour and 8-hour ozone concentrations.
8. Review the role of fuel cells, hydrogen, LNG and CNG in fueling the transportation sector of California and the Bay Area. Make recommendations pertaining to the benefits and disbenefits of each technology.